REMARKS/ARGUMENTS

Applicants would like to thank the Examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office action, and applicants request that the application be favorably reconsidered in view of the remarks and amendments made herein.

Affirmation of the election to prosecute the invention of Group II, claims 7-27 is hereby made. Claims 1-6 and 28 have been cancelled herein.

Claim 7 was rejected under 35 U.S.C. 102(b) as being anticipated by Severiens (U.S. Patent No. 5,286,437). Traversal of this rejection is made for at least the following reasons. Severiens does not disclose an auger screw for moving a predetermined powdered material through a first heated tube *and* means for heating the tube such that powdered material within the tube is heated to a predetermined temperature, the means for heating being coupled to an outer portion of the tube, as required by claim 7. The Examiner relies on mixing elements 7 of Severiens as being equivalent to the claimed auger screw. However, the mixing elements 7 of Severiens are provided within a mixer and are used to supply frictional heat to form a hot mixture of PVC powder and additives. Accordingly, Severiens does not disclose a system having both an auger screw *and* heating means. If the mixing elements 7 are relied upon as being equivalent to the claimed heating means, it is noted that the mixing elements 7 are not configured to heat the mixer. Further, the mixing elements 7 are not coupled to an outer portion of the mixer 3, as required by claim 7. Because Severiens fails to disclose each and every element as set forth in claim 7, Severiens cannot anticipate such claim 7. Withdrawal of this rejection is respectfully requested.

Claims 8-9, 11, and 14-15 were rejected under 35 U.S.C. 103(a) as being unpatentable over Severiens in view of Arpajian, et al. (U.S. Patent No. 3,741,699), further in view of Seta, et al. (U.S. Patent No. 6,824,374). Traversal of this rejection is made for at least the following reasons. There is no motivation to combine Severiens, Arpajian, and Seta in the manner suggested by the Examiner. In Severiens, materials are combined and heated to form a homogenous mixture within a mixer 3 prior to being dispensed to an extruder 1. Arpajian discloses three extrusion cylinders 46, 48, 50, which are heated in order to plasticize, or melt, the powdered material within the cylinders. Each of the three cylinders feeds extruded performs to one of three rows of mold cavities. Thus, the extrusion cylinders 46, 48, and 50 are equivalent to extruder 1 of Severiens rather than to mixer 3 of Severiens, as contended by the Examiner.

Further, Seta discloses a plasticizing unit for an injection-molding machine in which resin material is melted and simultaneously kneaded with a screw 6 prior to being injected into a mold. Thus, the plasticizing unit of Seta is equivalent to the extruder 1 of Severiens and the extrusion cyclinders 46, 48, and 50 of Arpajian. There is nothing within any of the cited references to combine a mixer used to create a homogenous mixture of different materials (Severiens) with an extruder (Arpajian) or plasticizing unit (Seta) used to melt materials for injection into a mold cavity.

Assuming arguendo that the references above can be combined or modified, the combination of the references still fails to teach or suggest each of the elements of at least claim 8. Specifically, none of the cited references teach or suggest *recirculating* powdered material between first and second heated tubes. The Examiner appears to rely on the plasticizing unit 6 and the buffering unit C of Seta as being equivalent to the claimed first and second heated tubes. However, the melted material within the plasticizing unit 6 and buffering unit C of Seta is not recirculated back and forth between the plasticizing unit 6 and the buffering unit C. Instead, Seta discloses that the material is melted within the plasticizing unit, stored in a buffering unit, and then dispensed within a reservoir. Once stored within the buffering unit, the material does not circulate back to the plasticizing unit.

Regarding claim 14, the Examiner appears to rely on the reservoir 4 of Seta as being equivalent to the claimed third heated tube. However, there is nothing within Seta that discloses, teaches, or suggests that the reservoir 4 includes a normally closed gate coupled to a bottom portion (or any portion) thereof.

Further still, there is nothing within Seta that discloses, teaches, or suggests that the reservoir 4 is heated, as required by claims 11, 14, and 15.

The Examiner contends that it would have been obvious "to modify the apparatus of Severiens with the multiple tubes of Arpajian and the sequence of moving the material as taught by Seta, et al. for the purposes of shortening cycle time". Applicants strongly disagree. The "multiple tubes" of Arpajian are extrusion cylinders. Severiens already discloses that the mixer 3 can feed material to multiple extrusion cylinders via outlets 9', 9'', and 9''' (see col. 3, lines 36-39). Accordingly, one skilled in the art would not have been motivated by the multiple extrusion cylinders of Arpajian for the purposes of shortening cycle time, as Severiens already discloses using multiple extrusion cylinders. With respect to the teachings of Seta, one skilled in the art would not have been motivated by Seta's sequence of moving material, as such a sequence would

effectively lengthen cycle time, rather than shorten it, as contended by the Examiner. In Severiens, material in the extrusion cylinder 1, which melts the material as the plasticizing chamber 6 of Seta does, is directly extruded into a tube 15. Similarly, the extrusion cylinders of Arpajian also directly extrude material into preforms, which are then dispensed into mold cavities.

For at least the aforementioned reasons, the combination of Severiens, Arpajian, and Seta does not render claims 8-9, 11, and 14-15 obvious. Withdrawal of this rejection is respectfully requested.

Claim 10 was rejected under 35 U.S.C. 103(a) as being unpatentable over Severiens in view of Arpajian, et al., further in view of Seta, et al., and further in view of Morgan (U.S. Patent No. 6,380,517). Traversal of this rejection is made for at least the following reasons. Claim 10 depends from claim 9, which is believed to be allowable for at least the reasons discussed above. Morgan does not make up for the aforementioned deficiencies of claim 9. Further, one skilled in the art of extrusion or injection molding would not have looked to Morgan, as Morgan is entirely unrelated to each of Severiens, Arpajian, and Seta. Further still, there is nothing within Morgan that discloses, teaches, or suggests that the baffles 50 of Morgan would maximize the distribution of water flowing therethrough, as contended by the Examiner. It appears that the Examiner found a reference that discloses baffles and used the teachings of the present application as motivation. As stated in Section 2143.01 of the MPEP, "the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)" (emphasis in original). Accordingly, the combination of Severiens, Arpajian, Seta, and Morgan does not render claim 9 obvious. Withdrawal of this rejection is requested.

Claims 12 and 13 were rejected under 35 U.S.C. 103(a) as being unpatentable over Severiens in view of Arpajian, et al., further in view of Seta, et al., and further in view of Takiura (U.S. Patent No. 3,891,372). Traversal of this rejection is made for at least the following reasons. Takiura is directed to melting and kneading a mixture consisting of a polymer with cross-linking property and a cross-linking agent distributed therein within an extruder 21 to cause the cross-linking reaction. Thus, if anything, the extruder 21 of Takiura is equivalent to extruder 1 of Severiens, extruders 46, 48, and 50 of Arpajian, and the plasticizing chamber 6 of Seta. Accordingly, one skilled in the art would not have been motivated by the extruder of Takiura having screw 24, which is used for melting and kneading a mixture therein, to circulate material

between a plurality of tubes. Further, Takiura does not disclose, teach, or suggest that the screw 24 is used for circulating material between plungers 31 and 31' as contended by the Examiner. The plungers 31 and 31' themselves are configured to draw material into the corresponding chambers 30 and 30'. Further, the material within the plungers 31 and 31' is not *moved between* the plungers, as required by claims 12 and 13. Contrary to the Examiner's contention, modifying any of Severiens, Arpajian, and Seta would only serve to complicate the apparatuses thereof. It is also noted that any disclosure of a flight restrictor coupled to a portion of an auger screw is absent from the cited references. For at least these reasons, withdrawal of this rejection is requested.

Claim 16 was rejected under 35 U.S.C. 103(a) as being unpatentable over Severiens in view of Arpajian, et al., further in view of Seta, et al., and further in view of Wallace (U.S. Patent No. 5,836,721). Traversal of this rejection is made for at least the following reasons. In each of Severiens, Arpajian, and Seta, powdered material is delivered directly to an extruder or plasticizer. Wallace discloses the use of pressurized airstreams and vacuum forces for a recirculating powder delivery system used for coating material. Because each of Severiens, Arpajian, and Seta are directed to melting materials and then extruding or injection molding the melted materials, none of the systems of Severiens, Arpajian, or Seta would need or have use for the recirculating powder delivery system as disclosed in Wallace. Thus, one skilled in the art of extrusion or injection molding would not have been motivated to modify an extrusion or injection molding apparatus with a powder delivery system for powder coating. Further, Wallace does not teach that the vacuum apparatus is employed to draw material into a tube from a storage container as required by claim 16. For at least these reasons, withdrawal of this rejection is requested.

Claims 17-18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Severiens in view of Arpajian, et al., further in view of Seta, et al., and further in view of Ladt, et al. (U.S. Patent No. 4,580,698). Traversal of this rejection is made for at least the following reasons. Claims 17 and 18 depend from one of claims 11 and 8, which are believed to be allowable for at least the reasons discussed above. Ladt does not make up for the aforementioned deficiencies of Severiens, Arpajian, and Seta. Accordingly, the combination of Severiens, Arpajian, Seta, and Ladt does not render claim 19 obvious. Withdrawal of this rejection is requested.

Claim 19 was rejected under 35 U.S.C. 103(a) as being unpatentable over Severiens in view of Wallace. Traversal of this rejection is made for at least the following reasons. Claim 19

depends from claim 7, which is believed to be allowable for at least the reasons discussed above. Wallace does not make up for the aforementioned deficiencies of Severiens. Accordingly, the combination of Severiens and Wallace does not render claim 19 obvious. Withdrawal of this rejection is requested.

Claims 20-24 and 26 were rejected under 35 U.S.C. 103(a) as being unpatentable over Severiens in view of Rudolph (U.S. Patent No. 4,684,488). Traversal of this rejection is made for at least the following reasons. Claims 20-24 depend from claim 7, which is believed to be allowable for at least the reasons discussed above. Rudolph does not make up for the aforementioned deficiencies of Severiens. Accordingly, the combination of Severiens and Rudolph does not render claims 20-24 obvious.

Regarding claim 26, neither Severiens nor Rudolph, individually or in combination, teach or suggest at least one heated tube having powdered material flowing therethrough, and means for heating the tube such that the powdered material flowing through the tube is also heated, wherein the powdered material is not melted within the tube. Severiens discloses a mixer have a screw therein for mixing and heating materials within the tube via friction energy. The mixer body itself is not heated such that the materials therein are heated, as required by claim 26. Rudolph is directed to regulating a drive of dosaging devices and thus, does not make up for the aforementioned deficiencies of Severiens. Because neither Severiens nor Rudolph, individually or in combination, disclose, teach, or suggest each and every element set forth in claim 26, the combination of Severiens and Rudolph cannot render claim 26 obvious. Withdrawal of this rejection is respectfully requested.

Claim 25 was rejected under 35 U.S.C. 103(a) as being unpatentable over Severiens in view of Wallace. Traversal of this rejection is made for at least the following reasons. Claim 25 depends from claim 7, which is believed to be allowable for at least the reasons discussed above. Wallace does not make up for the aforementioned deficiencies of Severiens. Accordingly, the combination of Severiens and Wallace does not render claim 25 obvious. Withdrawal of this rejection is requested.

Additionally, based on the rejections made herein, it appears that the Examiner is improperly using the present invention as a roadmap to find its prior art components. The US Court of Appeals for the Federal Circuit has stated:

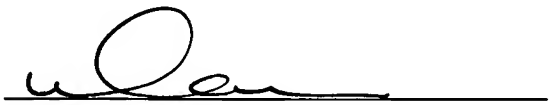
> This court has provided further assurance of an "as a whole" assessment of the invention under § 103 by requiring a showing that an artisan of ordinary skill in the art at the time of invention, confronted by the same problems as the inventor and with no knowledge of the claimed invention, would select the various elements from the prior art and combine them in the claimed manner. In other words, the examiner or court must show some suggestion or motivation, before the invention itself, to make the new combination. See *In re Rouffet*, 149 F.3d 1350, 1355- 56 (Fed. Cir. 1998) (emphasis added).

Ruiz v. A.B. Chance Co., 357 F.3d 1270, 69 U.S.P.Q.2D (BNA) 1686 (Fed. Cir. 2004).

In light of the foregoing, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No. 36110.

Respectfully submitted,
PEARNE & GORDON LLP



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Date: December 8, 2005